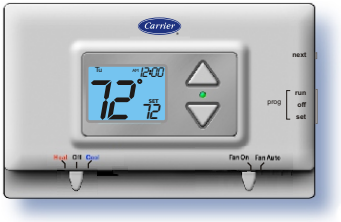
Carrier®
Heating & Cooling

TSTATCCPQ501 PROGRAMMABLE

DIGITAL THERMOSTAT

USER INFORMATION MANUAL FOR THE OPERATION AND MAINTENANCE OF YOUR NEW THERMOSTAT

SINGLE STAGE HEAT & COOL THERMOSTAT



5+2 DAY PROGRAMMABLE

5+2 DAY PROGRAMMABLE DIGITAL THERMOSTAT

- **Separate programs for weekdays & weekends**
- **Large, easy to read, backlit digital display**
- **Installation Flexibility**
  - **Batteries required for 4-wire operation**
  - **No batteries needed for 5-wire operation**

• Meets California Title 24 Residential

NOTE TO INSTALLER: THIS MANUAL MUST BE LEFT WITH THE EQUIPMENT USER.

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Carrier Corporation • Residential Light Commercial Systems • Patents Pending 4/03

Safety Warnings

TSTATCCPQ501

CAUTION Follow *Installation Instructions* carefully.

DISCONNECT POWER TO THE HEATER - AIR CONDITIONER BEFORE REMOVING THE OLD THERMOSTAT AND INSTALLING THE NEW THERMOSTAT.

WARNING

CAUTION

The 2 Alkaline “AA” batteries must be replaced at least every 12 months to assure proper operation. The thermostat will display the Low Battery code (fig. 1) on the display of the thermostat when it is time to replace the batteries. If the thermostat is connected to 24v power, the Batteries may still be installed, but are not required.

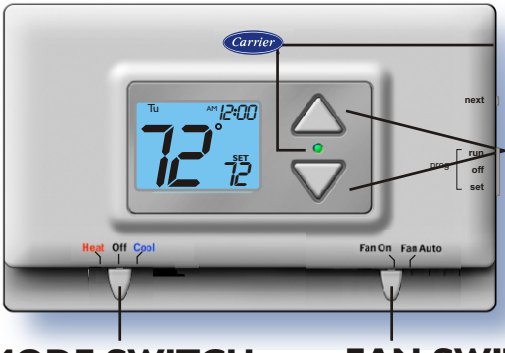
FIG. 1

When Lb is displayed the batteries must be replaced immediately. The manufacturer cannot be liable for improper operation of the thermostat if the batteries are not immediately replaced.

The annual battery replacement is especially critical in locations subject to freezing temperatures. The thermostat will be unable to turn on the Heat if the batteries are exhausted.

This device complies with Part 15 of the FCC rules. Operation is subject to the following 2 conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Location of Controls



HEAT/COOL INDICATOR

UP & DOWN BUTTONS

The Heat/Cool indicator will only energize if the thermostat is system powered.

MODE SWITCH
Heat, Cool or Off

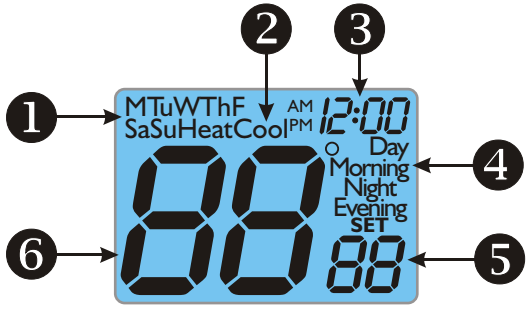
FAN SWITCH
On or Auto

NEXT BUTTON
For programming

How to Use: **The Next button is used to advance from one step to the next in the programming and advanced setup screens of the thermostat (pages 8-16). It is also used to enter the Advanced Setup screens (page 16).**

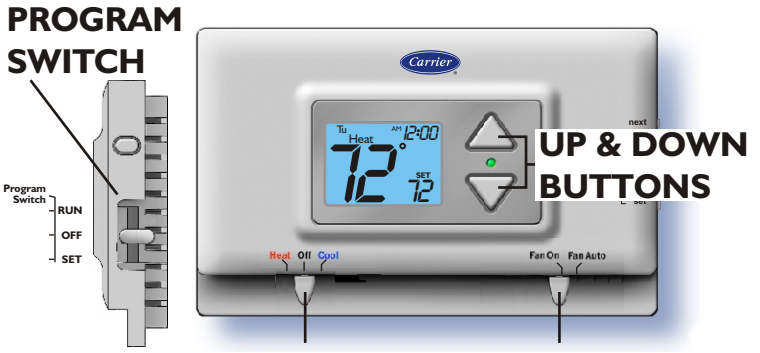
PROGRAM SWITCH
RUN program
Program OFF
SET program

Display



1. Day of the week. When programming, MTuWThF represents the 5 weekdays, SaSu represent the 2 weekend days.
2. Heat and Cool indicators. In normal operation, Heat or Cool appears, reflecting the mode switch position.
3. Clock Display.
4. Time period indicators. These indicate the part of the program that is currently active, if the program switch is positioned to Run.
5. Desired Set temperature indicator.
6. Current room temperature indicator.

Normal Operation



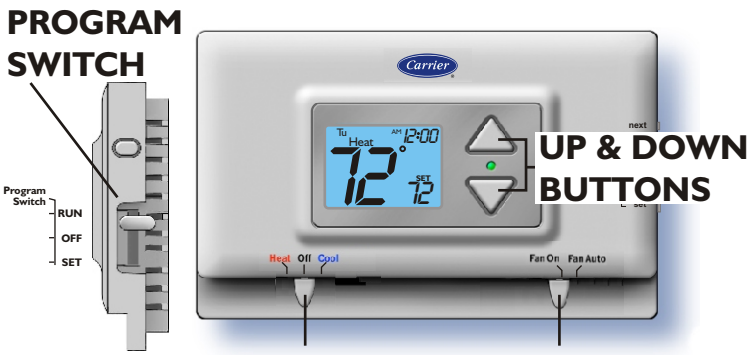
MODE SWITCH
Heat, Cool or Off

FAN SWITCH
On or Auto

Manual Operation (program switch OFF)

1. Select heat or cool with the mode switch.
2. Normally leave the fan switched to auto.
   In fan auto, the fan will turn on only with a heat or cool demand. When Fan On is selected, the fan will run continuously.
3. Adjust the desired set temperature with the Up or Down buttons.

Normal Operation



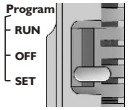
MODE SWITCH
Heat, Cool or Off

FAN SWITCH
On or Auto

Programmed Operation (program switch RUN)

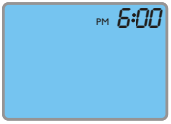
1. Select heat or cool with the mode switch.
2. Normally leave the fan switched to auto.
   In fan auto, the fan will turn on only with a heat or cool demand. When Fan On is selected, the fan will run continuously.
3. Optionally; adjust the desired set temperature for temporary override. The programmed settings will restore in the following time period.

Clock Set



Slide the program switch to the SET position.

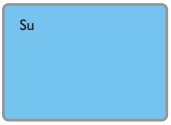
Setting the time & day are the first 2 steps after sliding the program switch to SET.



Use these buttons to adjust the current time.

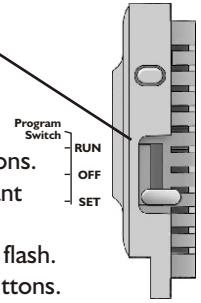
Pushing and holding the Up or Down buttons will slew the time by 10s of minutes.

Press the NEXT button for 5 seconds to enter advanced setup. (Page16)



Use these buttons to adjust the current day.

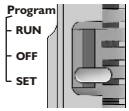
Overview



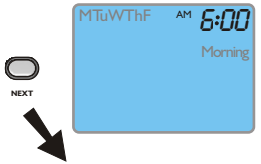
- Slide the program switch to the SET position.
- The blinking icon(s) on the display may be changed by pressing the Up or Down buttons.
- After the blinking icon is changed how you want it, press the Next button.
- The next icon in 'programming sequence' will flash. It can be modified with the Up & Down buttons.
- Continue the steps above until programming is complete.
- Slide the program switch to RUN and the thermostat will now run the time period programming.
- If the program switch is in the OFF position, the thermostat will not run the time period program. In this case the thermostat will be a manual heat or cool only thermostat.
- Please be certain to program each time period in chronological order to ensure proper programmed operation of the thermostat. For example, if the Morning Start Time is 6:30am, then the Day Start Time MUST be programmed for any time AFTER the 6:30am Morning Start Time.

Time Period Programming

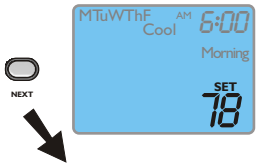
Weekday Programming



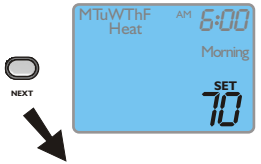
Slide the program switch to the SET position. The 1st 2 steps are clock and day set, see page 7.



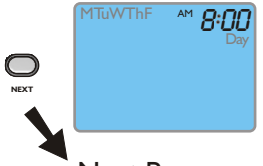
Use these buttons to adjust the start time for the morning time period.



Use these buttons to adjust the cool setpoint for the morning time period.



Use these buttons to adjust the heat setpoint for the morning time period.



Use these buttons to adjust the start time for the day time period.

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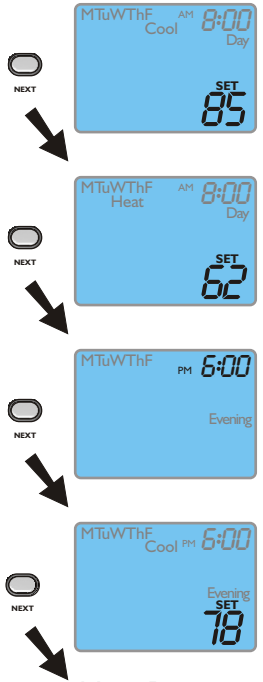
Time Period Programming

Weekday Programming



Use these buttons to adjust the cool setpoint for the day time period.

Use these buttons to adjust the heat setpoint for the day time period.

Use these buttons to adjust the start time for the evening time period.

Use these buttons to adjust the cool setpoint for the evening time period.

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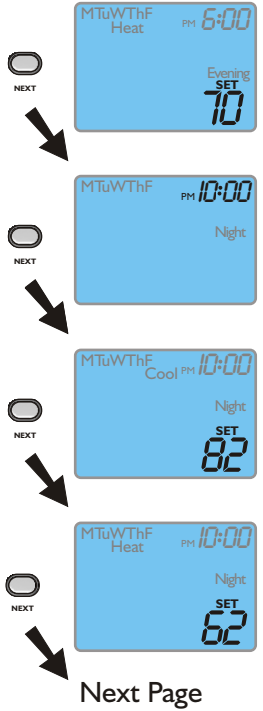
Time Period Programming

Weekday Programming



Use these buttons to adjust the heat setpoint for the evening time period.

Use these buttons to adjust the start time for the night time period.

Use these buttons to adjust the cool setpoint for the night time period.

Use these buttons to adjust the heat setpoint for the night time period.

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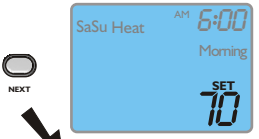
Time Period Programming

Weekend Programming

Use these buttons to adjust the start time for the morning time period.

Use these buttons to adjust the cool setpoint for the morning time period.



Use these buttons to adjust the heat setpoint for the morning time period.

Use these buttons to adjust the start time for the day time period.

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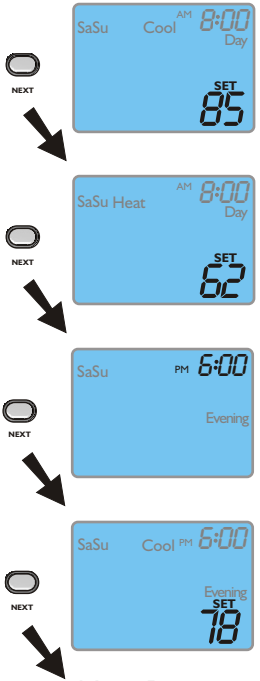
Time Period Programming

Weekend Programming



Use these buttons to adjust the cool setpoint for the day time period.

Use these buttons to adjust the heat setpoint for the day time period.

Use these buttons to adjust the start time for the evening time period.

Use these buttons to adjust the cool setpoint for the evening time period.

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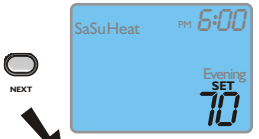
Time Period Programming

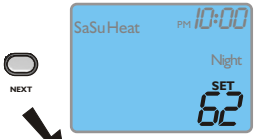
Weekend Programming



Use these buttons to adjust the heat setpoint for the evening time period.

Use these buttons to adjust the start time for the night time period.

Use these buttons to adjust the cool setpoint for the night time period.



Use these buttons to adjust the heat setpoint for the night time period.

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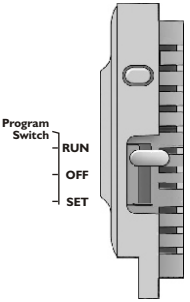
Time Period Programming

After completion of setting the time period programming, you have 2 options:

1) Run the time period program by sliding the Program Switch to the **RUN** position.

Or,

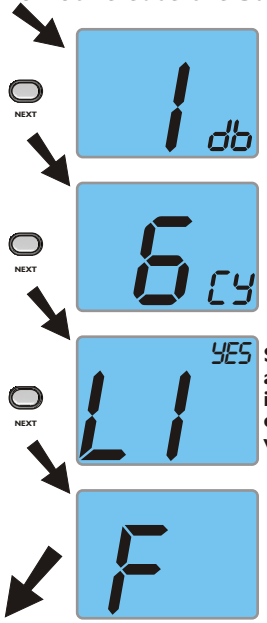
2) Do not run the time period program. The thermostat will operate as a manual heat/cool thermostat. Slide the Program Switch to **OFF** in this case.



Advanced Setup

This is normally done by the installer at initial installation.

Enter advanced setup by adjusting the program switch to SET. When the clock is flashing, press NEXT for 5 seconds. Do not release the button until this screen appears.



Use these buttons to adjust the deadband from 1 to 6 degrees.

Use these buttons to adjust the cycles/hour from 2 to 6.
d=no limit (zoning)
d1=d+no compressor lockout.

Step only appears if connected to 24 volt power

Select YES to have the backlight always on, or NO to turn off the backlight 8 seconds after a button press.

Use these buttons to select thermostat operation in degrees C or F.

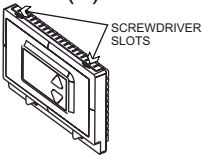
If degrees C is selected two presses of the Up or Down buttons will be required to change the setpoint.

Adjust the program switch to OFF or RUN to exit Advanced Setup.

Battery Replacement

To Open The Thermostat

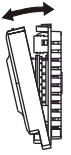
1. The top of the thermostat housing has two (2) screw-driver slots to assist when seperating.



2. To pull the housing apart, insert a small blade screw-driver into the slot and rotate 90°. This will release the top housing snaps.

3. Repeat the procedure in the other screw driver slot.

4. Separate the housing halves by pulling the top forward until the pins release, and then lift the bottom out.



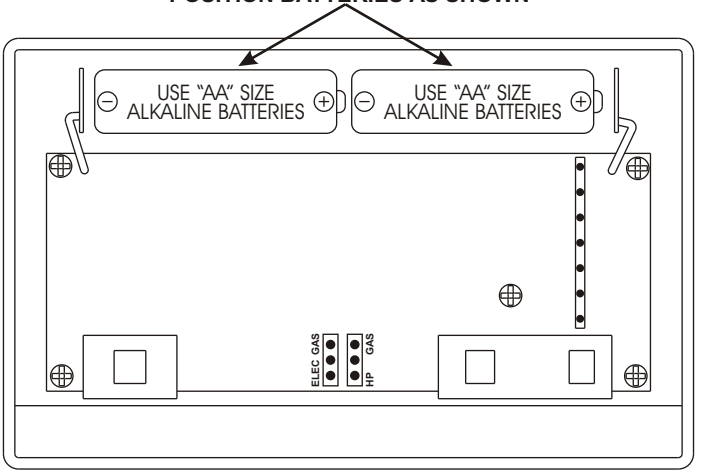
The batteries must be replaced immediately when the thermostat displays the Low Battery code (fig.1).

FIG. 1

Battery Replacement

5 **REPLACE WITH ALKALINE BATTERIES AT LEAST ONCE EVERY YEAR, OR WHEN THE "LOW BATTERY" LB ICON APPEARS (pages 2,17).**

POSITION BATTERIES AS SHOWN



IF THE THERMOSTAT IS CONNECTED TO 24V POWER, THE BATTERIES MAY STILL BE INSTALLED. INSTALLING THE BATTERIES WHEN SYSTEM POWERED (24VAC) WILL KEEP THE CLOCK RUNNING IN THE EVENT OF LINE POWER INTERRUPTION.

Warranty

5-Year Warranty - This Product is warranted to be free from defects in material and workmanship. If it appears within five years from the date of original installation, whether or not actual use begins on that date, that the product does not meet this warranty, a new or remanufactured part, at the manufacturer's sole option, to replace any defective part will be provided without charge for the part itself; PROVIDED the defective part is returned to the distributor through a qualified servicing dealer.

THIS WARRANTY DOES NOT INCLUDE LABOR OR OTHER COSTS incurred for diagnosing, repairing, removing, installing, shipping, servicing or handling of either defective parts or replacement parts. Such costs may be covered by a separate warranty provided by the installer.

THIS WARRANTY APPLIES ONLY TO PRODUCTS IN THEIR ORIGINAL INSTALLATION LOCATION AND BECOMES VOID UPON REINSTALLATION.

LIMITATIONS OF WARRANTIES – ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH THE LIMITED WARRANTY IS GIVEN. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MANY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.
ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR:

1. Normal maintenance as outlined in the installation and servicing instructions or owners manual including filter cleaning and/or replacement and lubrication.
2. Damage or repairs required as a consequence of faulty installation, misapplication, abuse, improper servicing, unauthorized alteration or improper operation.
3. Failure to start due to voltage conditions, blown fuses, open circuit breakers or other damages due to the inadequacy or interruption of electrical service.
4. Damage as a result of floods, winds, fires, lightning, accidents, corrosive environments or other conditions beyond the control of the Manufacturer.
5. Parts not supplied or designated by the Manufacturer, or damages resulting from their use.
6. Manufacturer products installed outside the continental U.S.A., Alaska, Hawaii, and Canada.
7. Electricity or fuel costs or increases in electricity or fuel costs from any reason whatsoever including additional or unusual use of supplemental electric heat.
8. ANY SPECIAL INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion of incidental or consequential damages, so the above may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary form state to state.

Programming Worksheet

see page 8

DAY	PERIOD	START TIME	COOL	HEAT
Monday Tuesday Wednesday Thursday Friday	Morning			
	Day			
	Evening			
	Night			
Saturday Sunday	Morning			
	Day			
	Evening			
	Night			

Please be certain to program each time period in chronological order to ensure proper programmed operation of the thermostat. For example, if the Morning Start Time is 6:30am, then the Day Start Time MUST be programmed for any time AFTER the 6:30am Morning Start Time. Also, if the Day Start time is set for 10:30am, then the Evening Start Time MUST be programmed for any time AFTER the 10:30am Day Start Time. Finally, if the Evening Start Time is set for 5:30pm, then the Night Start Time MUST be programmed for any time AFTER the 5:30pm Night Start Time.

Printed on recycled paper.
P/N 88-399 Rev. 2

Form No. OM-TSTAT-36
Catalog No. 03TS-TA51